

## U-MHU Series for Outdoor Use

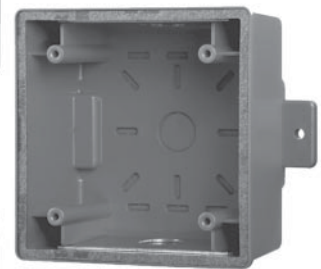
### Weatherproof Models U-MHU Electronic Sync/Non-Sync Horn for Outdoor Use

#### ENGINEER AND ARCHITECT SPECIFICATIONS

- Listed for outdoor use when mounted to a MT-SUR-BOX outdoor backbox
- Available with a 100 candela strobe
- Sync strobes and sync temporal horns, with horn silence on 2 wires
- Distinctive temporal horn
- Internally adjustable volume control
- UL 1971 & UL 464 listed
- UL 1971 listed for wall mount only
- ADA/NFPA/ANSI compliant
- Screw terminals accept 12 awg wire
- Synchronization requires Dual Sync Control Module or PAD-3
- Made in U.S.A., ISO 9001 quality crafted



U-MHU-S110



MT-SUR-BOX



U-MHU-WP

### Description

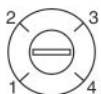
The weatherproof Sync Electronic Horns and Horn Strobes provide synchronous strobes with synchronous temporal tone signals on one pair of wires or temporal or steady tone in a non-sync mode.

Siemens Building Technologies, Inc., Fire Safety notification appliances are designed with the installer in mind. They are constructed with the electronics in the housing and not in the box. This design eliminates possible ground faults from crowded electrical boxes.

An internal volume control provides adjustment of dBA output levels.

The strobe construction consists of a Xenon flashtube with solid state circuitry for maximum reliability and efficiency. The strobe has a rounded dome shape made of clear polycarbonate.

These weatherproof appliances are used on circuits with steady power or a Dual Sync Control Module or PAD-3. Not for use on coded circuits.



**Detail - Volume adjust**  
(factory set at max. volume)

## Environmental

-31°F to 150°F (-35°C to 66°C) Maximum humidity of 98% RH± 2%

## Operating Voltage Range Limits

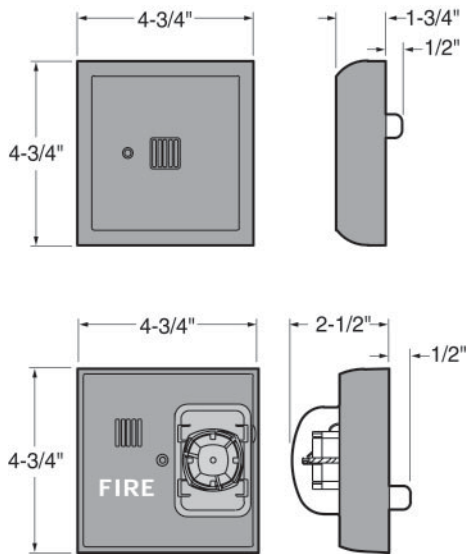
Horn: 16-32Vdc or VFWR  
 Strobe: 20-31 Vdc or VFWR  
 Strobe current at 24Vdc 249mA

## Typical Horn Ratings at 10 Feet\*

Temporal Horn –  
 Maximum: 95 db @ 54 mA  
 Minimum: 90 db @ 30 mA

\* Typical dBA ratings are frontal sound readings taken with a dB meter with signal mounted on wall.

## Dimensions



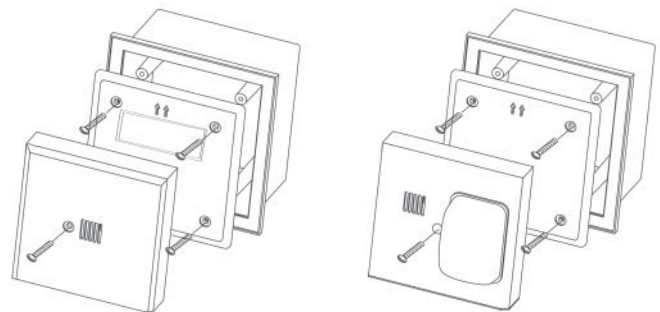
Listed operating range is 16 to 32 VDC/FWR  
 Temporal maximum UL measurements are 83.6 db at 24VDC/FWR. Steady tone maximum UL measurements are 87.8 db at 24VDC/FWR taken in free air at 360° around the device and averaged. Typical readings are frontal sound readings taken with a dB meter with signal mounted on wall. Rated for indoor or outdoor use.

**NOTE: These notification appliances are UL listed and rated as "special application", which represents appliances which have been investigated to operate as described in the product's installation instructions over the voltage range of 16-32 VDC or VFWR.**

## Control Module Specifications:

Maximum Current Output: 3 Amps Max. not to exceed NAC rating  
 DSC Module Operating Voltage: 16 to 32 Vdc or VFWR  
 DSC Module Operating Current: Non-Silenceable Circuit side - 55mA, Silenceable Circuit side - .005 Amps.  
 Maximum Current Output: 3 Amps max. not to exceed Circuit rating

## Mounting to MT-SUR-BOX Backbox



For the complete wiring diagram for U-MHU Series Horn/Strobes refer to Installation Instruction Sheet

## Ordering Information

### U-MHU Series Horn Wall Mount

Model Number	Description	Part Number	Low Volume Horn Current	High Volume Horn Current	Strobe Current at 24Vdc	High Volume dB Rating @10'
U-MHU-WP	Electronic Outdoor Sync-Horn, Red	500-649090	30ma	54ma		95 db
U-MHU-S110S-1	Electronic Outdoor Sync-Horn/Sync-Strobe, Red	500-649460	30ma	54ma	249mA	95 db
U-MHU-S110-1	Electronic Outdoor Horn/Strobe, Red	500-649461	30ma	54ma	249mA	95 db
MT-SUR-BOX	Outdoor Backbox, Red	500-693168				

\*All current measurements made at 24VDC

**NOTE:** Refer to installation sheet P/N 315-149460-2 for UL dB ratings

# Wiring Diagram

## Typical Wiring for U-MHU-S110S-1 for Synchronized Operation with DSC(-W) Dual Sync Control Module Audible Signal and Strobe on Same Circuit (Audible Signal and Strobe Synchronized), Audible Signal Silenceable Polarity Shown In Alarm Condition

**Notes:**

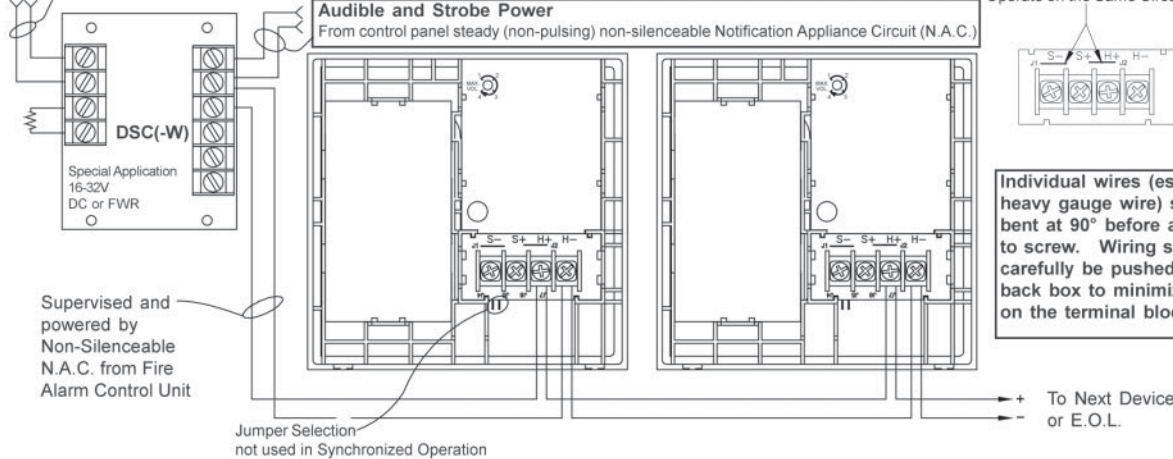
1. When audible and strobe units are powered from the same source, the 20-31 V rating must be used.
2. When audible and strobe units are powered from the same source, add the currents for both devices.

**Audible Control**

From control panel silenceable Notification Appliance Circuit (N.A.C.)

**Audible and Strobe Power**

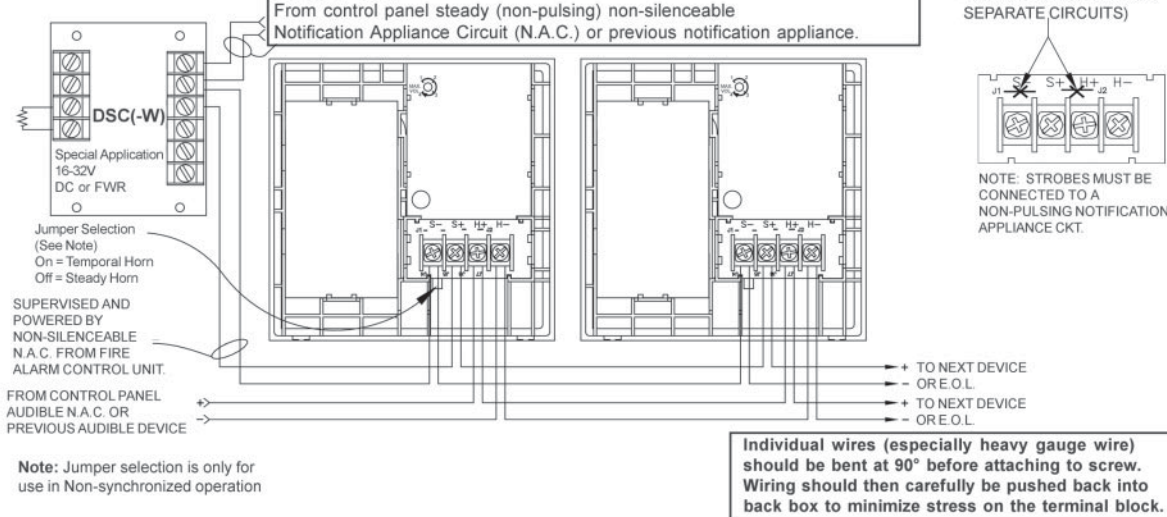
From control panel steady (non-pulsing) non-silenceable Notification Appliance Circuit (N.A.C.)



## Typical Wiring Diagram for U-MHU-S110S-1 Non-Synchronized Operation of Audible Signal and Synchronized Operation of Strobe on Separate Circuits

**Strobe Power**

From control panel steady (non-pulsing) non-silenceable Notification Appliance Circuit (N.A.C.) or previous notification appliance.



# Wiring Diagram

## Typical Wiring for U-MHU-S110-1 for Non-Synchronized Operation Audible Signal and Strobe on Same Circuit Polarity Shown In Alarm Condition

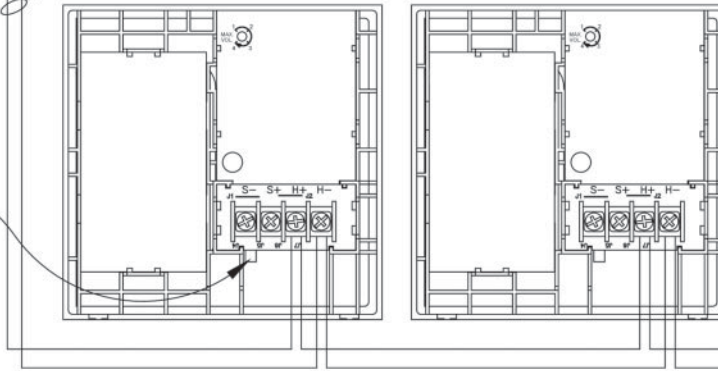
**Notes:**

1. When audible and strobe units are powered from the same source, the 20-31 V rating must be used.
2. When audible and strobe units are powered from the same source, add the currents for both devices.

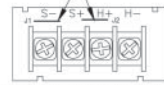
From control panel,  
**steady** silenceable Notification Appliance Circuit (N.A.C.)

Jumper Selection  
On = Temporal Horn  
Off = Steady Horn

Jumper selection  
is only for use in  
Non-synchronized  
operation



Leave Jumpers in Place  
(Strobe and Audible Signal are to  
Operate on the Same Circuit)

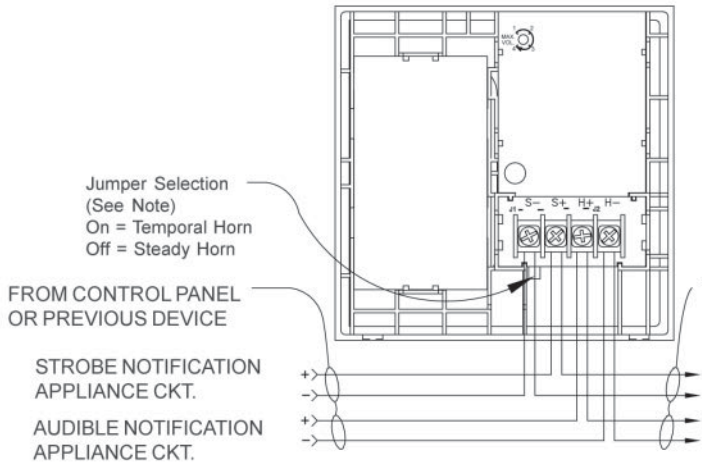


NOTE: Signal and Strobe Must be Connected  
to a Non-Pulsing Notification Appliance Ckt.

Individual wires (especially  
heavy gauge wire) should be  
bent at 90° before attaching  
to screw. Wiring should then  
carefully be pushed back into  
back box to minimize stress  
on the terminal block.

+ To Next Device  
- or E.O.L.

## Typical Wiring Diagram for U-MHU-S110-1 Non-Synchronized Operation of Audible Signal and Strobe on Separate Circuits



Jumper Selection  
(See Note)  
On = Temporal Horn  
Off = Steady Horn

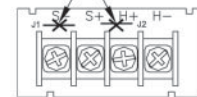
FROM CONTROL PANEL  
OR PREVIOUS DEVICE

STROBE NOTIFICATION  
APPLIANCE CKT.

AUDIBLE NOTIFICATION  
APPLIANCE CKT.

Note: Jumper selection is only for  
use in Non-synchronized operation

CUT JUMPERS (AUDIBLE  
SIGNAL AND STROBE ON  
SEPARATE CIRCUITS)



NOTE: STROBES MUST BE  
CONNECTED TO A NON-PULSING  
NOTIFICATION APPLIANCE CKT.

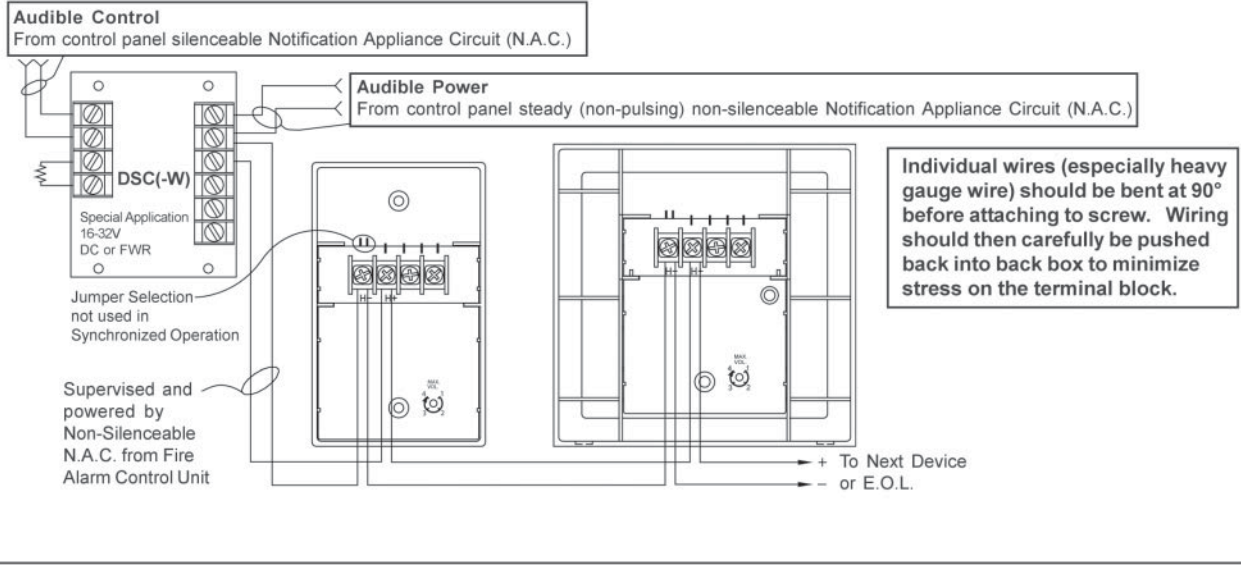
TO NEXT DEVICE OR E.O.L.

ALARM POLARITY SHOWN

Individual wires (especially heavy gauge wire)  
should be bent at 90° before attaching to screw.  
Wiring should then carefully be pushed back into  
back box to minimize stress on the terminal block.

# Wiring Diagram

## Typical Wiring for U-MHU-WP for Synchronized Operation with DSC(-W) Dual Sync Control Module (Sync and Silenceable Operation) Polarity Shown In Alarm Condition



## Typical Wiring for U-MHU-WP for Non-Synchronized Operation Polarity Shown In Alarm Condition

